

ABSTRACT OF THE DISCLOSURE

VARIABLE FILTER-BASED OPTICAL SPECTROMETER

5 An optical spectrometer uses a tapered Fabry-Perot type linear variable
optical filter in conjunction with an optical detector array. The filter can be a long-pass,
short-pass, or narrow bandpass filter. The stability of the variable optical filter allows
high resolution, depending on the number and spacing of the detectors used. In a further
embodiment, signal-processing techniques are used to enhance the resolution of the
10 spectrometer beyond the measured response.